INTEGRATED ELECTROMAGNETIC INTERFERENCE FILTERS AND FEEDTHROUGHS

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An apparatus comprising:

one or more Input/Output (I/O) conductors, wherein the I/O conductors pass through a hermetic seal such that a first end of the I/O conductors resides on a non-hermetic side of the hermetic seal and a second end of the I/O conductors resides on a hermetic side of the hermetic seal within a metal case hermetically sealed interior of the apparatus;

a printed circuit interconnect substrate residing on the hermetic side of the hermetic seal; and

one or more ceramic chip capacitors mounted on the printed circuit interconnect substrate to face inward into the hermetically sealed interior, wherein a first end of each capacitor is electrically connected via printed circuit interconnect to the second end of an I/O conductor and a second end of each capacitor is electrically connected via the printed circuit interconnect to the metal case.

- The apparatus of claim 1, wherein the printed circuit interconnect substrate is 2. (Original) mounted on the hermetic side of the hermetic seal.
- The apparatus of claim 1, wherein the printed circuit interconnect substrate 3. (Original) includes a printed circuit board material.
- 4. (Original) The apparatus of claim 3, wherein the printed circuit board material includes a ceramic.
- The apparatus of claim 3, wherein the printed circuit board material includes FR4. 5. (Original)
- 6. (Previously Presented) The apparatus of claim 1, wherein the printed circuit interconnect substrate includes flexible circuit tape.

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- The apparatus of claim 6, wherein the flexible circuit tape includes 7. (Previously Presented) polyimide.
- The apparatus of claim 1, wherein the printed circuit interconnect substrate is a multi-layer substrate.
- The apparatus of claim 1, wherein the printed circuit interconnect substrate 9. (Original) includes an electrically conductive medium.
- 10. (Original) The apparatus of claim 9, wherein the electrically conductive medium includes solder.
- 11. (Original) The apparatus of claim 9, wherein the electrically conductive medium includes conductive epoxy.
- 12. (Original) The apparatus of claim 9, wherein the electrically conductive medium includes wire-bonds.
- 13. (Original) The apparatus of claim 1, wherein the capacitors have a dielectric breakdown voltage of about 1200 volts.
- 14. (Original) The apparatus of claim 1, wherein the capacitors have a dielectric breakdown voltage within a range of about 200 to 1500 volts.
- 15. (Original) The apparatus of claim 1, wherein the capacitors are discrete capacitors.
- 16. (Original) The apparatus of claim 15, wherein the capacitors include surface mount packaging.

- 17. (Original) The apparatus of claim 1, wherein the capacitors are included in a multi-chip package.
- 18. (Original) The apparatus of claim 1, wherein the capacitors are adapted to filter electromagnetic interference.
- 19. (Original) The apparatus of claim 1, wherein the hermetic seal is part of an implantable medical device.
- 20. (Original) The apparatus of claim 19, wherein the hermetic seal includes a ceramic.
- 21. (Original) The apparatus of claim 19, wherein the hermetic seal includes an epoxy.
- 22. (Original) The apparatus of claim 19, wherein the hermetic seal includes a glass.
- 23. (Original) The apparatus of claim 1, wherein the I/O conductors are pins.
- 24. (Original) The apparatus of claim 1 wherein the I/O conductors are wires.
- 25. (Original) The apparatus of claim 1 wherein the I/O conductors are conductive traces.
- 26. (Original) The apparatus of claim 25, wherein the conductive traces are included in a printed circuit interconnect that accommodates surface mounting of electronic components.
- 27-37. (Canceled)